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Town of Loomis
***TRAILS
MASTER PLAN
2009***



TRAILS MASTER PLAN

2009

Adopted: xxxx, 2009

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Introduction 1

A. Trails Master Plan Intent

The Town of Loomis, through the use of this document, intends to define a vision for a trail system that includes opportunities for pedestrians, bikes and equestrians.



In that the Town of Loomis does not currently have (circa 2009) a defined trails system (other than a partially implemented Bikeway Master Plan), this document provides the beginning for an ongoing opportunity to establish policies and standards that can be adopted into other Town land use and zoning documents that establish legal standards that control the development of future projects, both public and private.

When proposing new development, or improving new public recreation facilities, this document should also be consulted along with the Town's General Plan Circulation section, Zoning Code, Bike Way Master Plan, Open Space policy plan, and Parks Master Plan (if available).

B. Trails Master Plan Content

This document is organized into the following Chapters:

Chapter 1 INTRODUCTION

Reviews plan intent and documents community outreach efforts.

Chapter 2 EXISTING CONDITIONS

This section defines the current opportunities and constraints associated with establishing a trail system and reviews the relationship of other County plans ,

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Introduction

or plans the Town should consider in coordinating efforts to improve trails throughout the town area.

Chapter 3 TRAILS MASTER PLAN

Proposed Trail System

This section illustrates opportunities to for a trail system and how it might relate to other circulation systems (bike and vehicular).

Trail Standards

This section illustrates typical cross-sections for trials of all types and combinations that might be utilized throughout the trail system.

Chapter 4 TRAILS IMPLEMENTATION

Acquiring Trails

This section discusses potential ways in which to acquire land for trails, and funding sources available.

Implementation Costs

This section reviews general costs associated with developing trails.

Management Issues

This section reviews issues the Town will need to consider in the management and long term viability of a trails system.

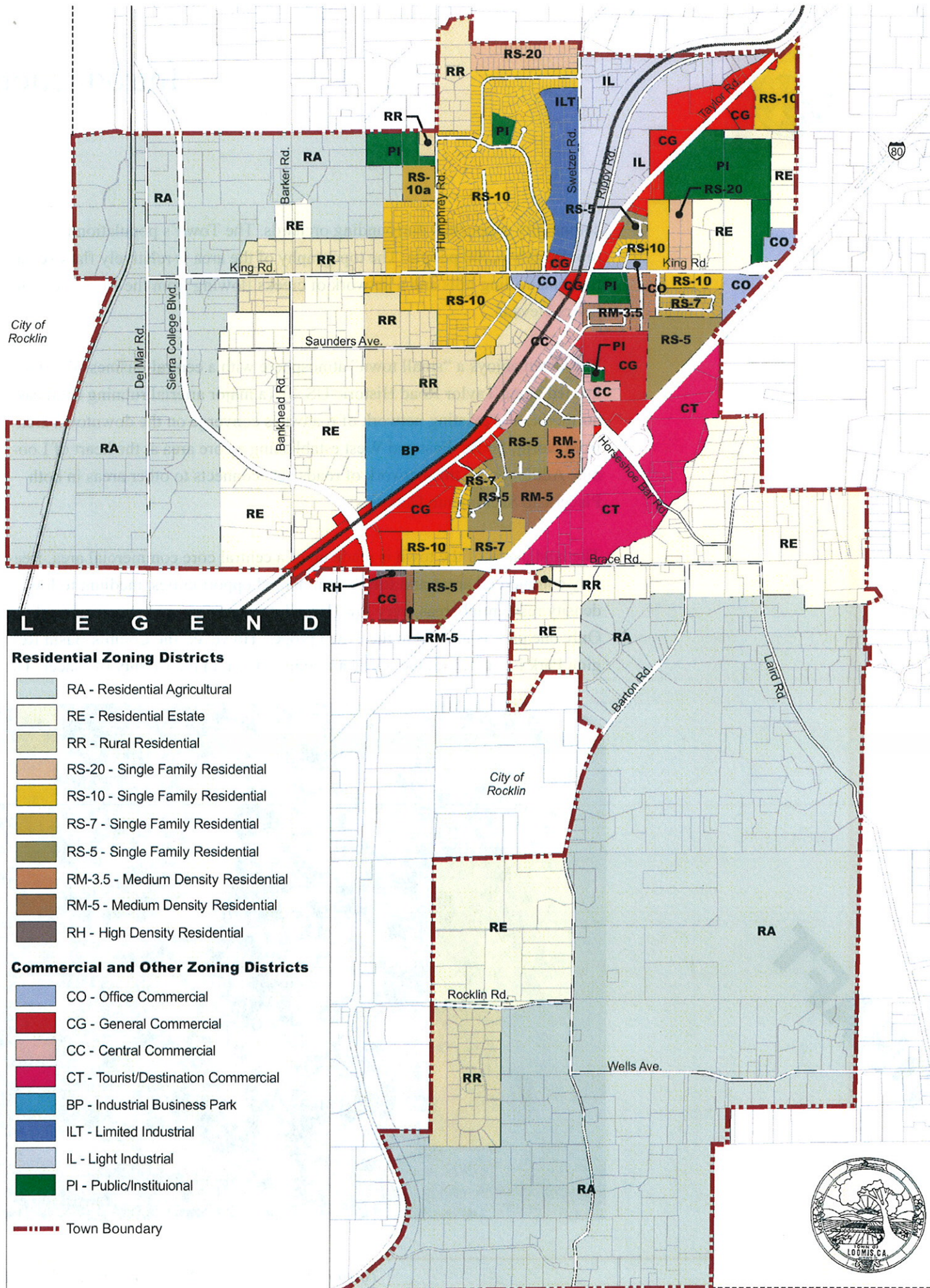
C. Setting

The Town of Loomis is located in the County of Placer, approximately 30-minutes north of the City of Sacramento. Located just off of the I-80 corridor and along Historic US Highway 40, the town was once a thriving agricultural



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Residential Zoning Districts

- RA - Residential Agricultural
- RE - Residential Estate
- RR - Rural Residential
- RS-20 - Single Family Residential
- RS-10 - Single Family Residential
- RS-7 - Single Family Residential
- RS-5 - Single Family Residential
- RM-3.5 - Medium Density Residential
- RM-5 - Medium Density Residential
- RH - High Density Residential

Commercial and Other Zoning Districts

- CO - Office Commercial
- CG - General Commercial
- CC - Central Commercial
- CT - Tourist/Destination Commercial
- BP - Industrial Business Park
- ILT - Limited Industrial
- IL - Light Industrial
- PI - Public/Institutional

--- Town Boundary





Introduction

community supporting surrounding orchards. The Town's population is approximately 6,200 people. The topography of the area is relatively flat except for some rolling hills and a network of creeks flowing from the foothills of the Sierra Nevada.

The Town enjoys a "small town" atmosphere with a central business district located along Taylor Road Historic US 40, (a major arterial running southeast to northeast). An existing network of roadways converge on the downtown area from North, South, East and West establishing a core area at the heart of Loomis. Additionally, this network of roads also connects to other areas in both Placer and Sacramento Counties.

The land use of the town is made up of a central core commercial area, free-way commercial areas and future commercial opportunities, medium to low density residential areas, very low (large lot properties), and supporting schools. Only one park is located in the Town proper. However, the Loomis Basin Region Park is located on the northeast edge of town in the County of Placer. The



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Loomis Basin Park includes passive and active recreation opportunities including an equestrian center.

Equestrian properties are located throughout the rural areas of the town. The Loomis Basin Horseman's Association is an active group of riders representing equestrian concerns in the Loomis Basin area.

D. Consistency and Coordination with Other Plans

Consistency and coordination are provided through the integration of Trails master Plan throughout the elements of the General Plan. There are discussions regarding the encouragement of non-motorized modes of transportation. These include:

From the General Plan, Page 48, Parks and Recreation, B. Bikeways and Trails

Bikeways and trails are another means to meet the recreational needs of Town residents. The Town of Loomis has designated several bikeways and trails within the community, which are also part of the Placer County Bikeway System and Trails Master Plan. Currently, one bikeway has been developed in Loomis along King Road, and portions of Taylor Road. The County has designated four additional bikeways within Loomis, which remain unimproved.

As noted above, Antelope Creek and Secret Ravine provide opportunities for open space corridors potentially providing hiking and equestrian trails. The creeks provide connections between the north and south areas of town, and to areas south of Loomis. The County has designated Secret Ravine as a Class 1 bicycle corridor in the regional bicycle transportation plan. The corridor is planned to extend from Loomis Basin Regional Park, west to the City of Roseville. This bikeway has not yet been improved. Secret Ravine has also been designated as an hiking and equestrian trail in the Loomis Basin Horsemen's Association Trails Master Plan and in other County planning documents. While no bikeways or trails have been designated along Antelope Creek, it is an important open space resource providing flood protection and significant riparian habitat value, and is also used as an informal hiking trail.

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E. Community Outreach

As a part of the preparation of this document, multiple public meetings were held in conjunction with the collection/presentation of information associated with the update of the Bikeway Master Plan. The meetings included the presentation of existing conditions, opportunities, discussions about types / sizes of trails, an over view of related County of Placer trails and greenway plans, and the distribution and collection of a trails survey.

The meetings were well attended by Town residents, Town officials, local area non-residents who either work in the town or pass through the town on bike rides, and members of the local equestrian association (Loomis Basin Horseman's Association, LBHA).

Survey Response

Responses to survey questions are indicated as follows: **R-#** is the number of Residents of Loomis who selected a specific answer, **NR- #** is the number of Non-Residents, and the total can be found in the parentheses (#).

1. What best represents your definition of a trail as it might relate to the Town of Loomis?

- ☐ A sidewalk along the curb of a street **R-1, NR-1 (2)**
- ☐ A separated sidewalk along a street: **R-3, NR-1, (4)**
- ☐ A maintained path (non-concrete or asphalt) **R-11, NR-5, (17)**
- ☐ Just wide enough for walking single file **R-0, NR-1, (1)**
- ☐ Used by bikes and pedestrians **R-7, NR-3, (11)**
- ☐ A place to ride my horse exclusive of bikes and pedestrians **R-2, NR-2, (4)**

Other: All of the above, depending on where it is (R), Curb, sidewalk downtown and less formal as it leaves town (R), Natural surface multi-use paths (NR)

2. What is your walking / running frequency in the Town of Loomis?

- ☐ 1-6 times a year **R-4, NR-2 (7)**
- ☐ 7-12 times a year **R-0, NR-0, (0)**

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- ☐ 2-4 times a month **R-2, NR-1, (3)**
- ☐ 5-8 times a month **R-4, NR-0, (4)**
- ☐ 3-5 times a week **R-6, NR-2, (8)**
- ☐ Daily **R-0, NR-1, (1)**

3. What is your average walking / running distance?

- ☐ Under 2-miles **R-12, NR-1 (14)**
- ☐ 2-5 miles **R-4, NR-3 (7)**
- ☐ 6-10 miles **R-1, NR-2 (3)**
- ☐ 10 plus miles **R-0, NR-0 (0)**

4. Why do you walk / run? (choose one or more)

- ☐ Exercise **R-15, NR-6 (21)**
- ☐ To get to work **R-0, NR-0 (0)**
- ☐ To get to school **R-0, NR-0 (0)**
- ☐ To get to shopping **R-2, NR-1 (3)**
- ☐ I do not walk around town **R-0, NR-1 (1)**
- ☐ I do not walk around town, but I would like to **R-2, NR-0 (2)**

Other: **Walking my dog (R), Pleasure (NR), Recreation (R)**

5. If you have children do they walk to school?

- ☐ Yes **R-0, NR-1 (1)**
- ☐ No **R-7, NR-2 (9)**

6. What are your concerns regarding your child's commute to school? Or, why do you not allow them to walk to school? (choose one or more)

- ☐ Fear of kidnapping **R-3, NR-0 (3)**
- ☐ Poor or no safe paths of travel **R-7, NR-3 (11)**
- ☐ Too far **R-3, NR-0 (3)**
- ☐ Large intersections to cross **R-1, NR-1 (3)**
- ☐ To much stuff to carry on their back **R-1, NR-0 (1)**

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7. What type of non-motorized user should trails accommodate? (choose one or more)

- ☐ Pedestrian **R-17, NR-7 (25)**
- ☐ Recreational Bicyclist **R-15, NR-6 (22)**
- ☐ Horse rider **R-12, NR-5 (18)**
- ☐ Mountain biker (rough ride) **R-7, NR-4 (11)**

8. Should natural areas along creeks be developed for trails?

- ☐ Yes **R-12, NR-7 (19)**
- ☐ No **R-1, NR-0 (1)**

Other: Not sure - is this legal? (R), Only with utmost environmental sensitivity (R), If publicly owned/easements (R), Yes, if done right to minimize impacts to natural resources (R), Maybe (R)

9. Would you be okay with a trail system behind or adjacent to your property?

- ☐ Yes **R-14, NR-6 (20)**
- ☐ No **R-0, NR-0 (0)**
- ☐ I would need to review the design impacts before answering **R-6, NR-1 (7)**

10. Should Town officials designate funding for the purchase of property to develop trails?

- ☐ Yes **R-14, NR-7 (20)**
- ☐ No **R-1, NR-0 (1)**

Other/comments: Yes, as available, no new tax (R), I would need to review the impacts before answering (R), Not in this economy, but maybe in better times (R),

11. How should trails development be funded?

- ☐ By developers as they improve property **R-18, NR-6 (24)**
- ☐ Utilizing existing taxes **R-6, NR-5 (11)**

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- ☐ Through a Town assessment or tax on property or purchases **R-6, NR-4 (10)**
- ☐ By private groups who might use the trails **R-10, NR-3 (13)**

Other: **Grants and Special Funding (R), Federal and State tax grants/user fee (R), PCTPA Grants (R), Grants (R), Grants (R), Use taxes only for trails w/a specific purpose like connecting to schools (R), Easements by willing property owners (NR)**

12. How important is the development of horse trails?

- ☐ Important - I ride horses **R-4, NR-2 (6)**
- ☐ Not important **R-5, NR-2 (7)**
- ☐ I would not like to see horse trails developed in the Town of Loomis **R-3, NR-0 (3)**

Other: **In some specific places (R), Important, I don't ride but like equestrian atmosphere and like to promote riding trails (R), I would like to see a trail along Secret Ravine from Loomis Park, but otherwise probably infeasible (R), Somewhat (R)**

13. What should a trails system in the Town of Loomis accomplish? (choose one or more)

- ☐ Supplement the bikeway system **R-10, NR-5 (15)**
- ☐ Connect parks, schools, work and/or shopping to neighborhoods **R-12, NR-4 (16)**
- ☐ Provide access through natural open space areas **R-12, NR-7 (19)**
- ☐ Connect to regional trail systems that touch the Town of Loomis **R-16, NR-7 (23)**
- ☐ Be a recreational opportunity **R-14, NR-7 (21)**

Other: **Connect to County Parks and equestrian places (R), Be safe and user friendly (R), Provide greater mobility (R),**

15. What is your relationship to Loomis?

- ☐ Resident of Loomis **(18)**

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- ☐ Work in Loomis / not a resident (2)
- ☐ Live in a neighboring community (5)

14. In the space below, please identify improvements that would influence you to use trails in the Town of Loomis.

Resident Responses:

- Connect paved trail system to surrounding systems.
- Create mountain bike trail system.
- This is a horse town!
- Connections along waterways. Access to regional parks.
- Shade. Dog-Friendly. Separate horses from others.
- If we had some along creeks to see them.
- Any improvements help. Stop losing trails as the town develops.
- I would like to see natural walking trails in Loomis, even if it's just a loop or a trail with no destination. Don't neglect Antelope Creek in favor of Secret Ravine, Antelope has a lot of potential.
- Develop them. There are multiple needs, don't try to do it all in one trail.
- Knowing that I am not trespassing.

Non-Resident Responses:

- Link business/shopping.
- Connect to regional trails.
- Connections to other trails, shopping, schools, rural atmosphere, scenery, parks.
- More dirt pathways for all to use and enjoy.
- Trails can meander around trees.
- Expansion of full width horse trails with proper signage.

Public Hearings

The process was also shared with the Town of Loomis Open Space Committee and City officials during normally scheduled public hearing meetings.

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Existing Conditions 2

A. Connection Opportunities

Except for sidewalks located in the downtown area, or in medium density subdivisions, a trail system within the Town does not currently exist. There are also no sidewalks that connect to adjacent jurisdictions (Rocklin, Penryn, County of Placer).

During the research phase of this document, the Consultant met with the County of Placer Trails representative to discuss connection opportunities. According to this meeting, the County of Placer is currently (Fall 2009) preparing a Trails Opportunity Map that is documenting all non-vehicular trails throughout the County and potential connections with planned trails / bikeways of the various jurisdictions within the County. In most cases related to the Town of Loomis, the County is looking at acquiring easements along King Road (in the County) in an effort to create a continuous "soft surface" multi-use path (bike / pedestrian) that would connect to a network of multi-use paths throughout the County. The County is slowly acquiring easements and estimates that it will be many years before a continuous network of multi-use trails are in place. As of the writing of this document there are no existing trails identified that connect with the Town of Loomis.

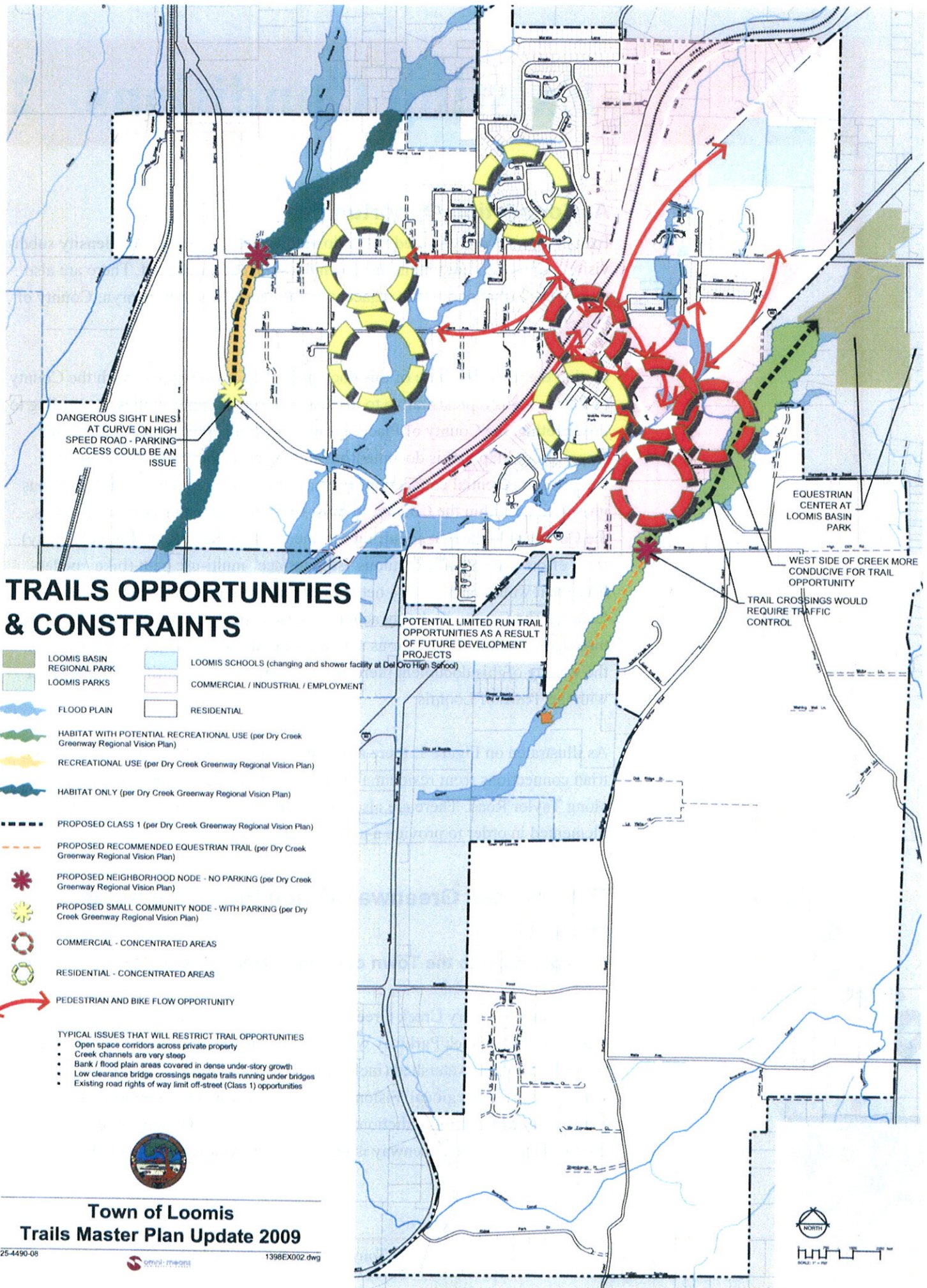
As illustrated on Figure 1, there are many opportunities to improve the pedestrian connections from residential and commercial areas to the town Center along Taylor Road. There are also a number of areas where trails might be implemented in order to provide a natural recreation opportunity.

B. Dry Creek Greenway Vision Plan (County of Placer)

(As applicable to the Town of Loomis Trails Master Plan)

The vision of the Dry Creek Greenway is for a connected open space system linking the Dry Creek Parkway with Folsom Lake State Recreation Area and the uplands of the watershed (including the Town of Loomis area). The Dry Creek Greenway Regional Vision is intended to provide a common sense of purpose for the multi-jurisdictional management of the Greenway resources. Establishment of the Greenway is intended to provide the following benefits:







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- Preservation and enhancement of riparian wildlife, salmonids and other aquatic species through protection and improvement of migration corridors cover, feeding and breeding habitat. Preservation of wildlife and fish bring benefits to local and regional communities through ecologically-based education and recreation opportunities.
- Enhancement of historic education opportunities and recognition of cultural values through protection of historically and prehistorically significant places, such as Native American heritage sites.
- Improvement of recreation opportunities such as walking, bicycling and horseback-riding through establishment of and connection to the regional open space network. The Dry Creek Greenway and associated regional trail system provides a significant recreational opportunity that local jurisdictions and businesses can use to attract tourists to the area.
- Preservation of the existing flood capacity and improved floodplain management for the Dry Creek stream system.
- Preservation and enhancement of the water quality within Dry Creek and its tributaries.
- Increased public stewardship for the streams within the Dry Creek watershed through exposure of the public to natural areas within western Placer County.

Applicable Policy Extracted from the Dry Creek Greenway Vision Plan *(indicated in Italics)*

Corridor Designations

Three types of corridor designations occur within the Greenway Vision Master Plan:

- *Recreational*
- *Habitat with potential recreation*
- *Habitat only*

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Existing Conditions

Recreational corridors provide Class I bikeway connections to major destinations within southwestern Placer County. While recreational corridors include recreational trails as a main element other values as specified by the vision statements, such as habitat preservation and enhancement, remain high priorities as well. Trail planning in these areas must seek to meet recreational needs while protecting the environment.

Habitat with potential recreation corridors should be managed to preserve and enhance habitat for birds, mammals, and fish, but also form important linkages between major regional bikeways. Trails are desirable in these corridors, but must be carefully located to limit impacts to riparian vegetation and the creek system. These corridors also occur in some areas where creeks pass through private property without designated public open space. Locating trails in these areas will not be possible without the willingness of the landowners to negotiate access. A fundamental principle of the Greenway Vision Plan is that private property owners will not be forced to allow public access on their property. However, through education and outreach, these individuals will be provided with suggestions on how best to manage their property in a manner that is consistent with the Greenway Vision Plan.

Habitat corridors are designated only for conservation and restoration of habitat, and protection of water quality. Recreational trails are not planned for these areas, which mostly occur on private land in the upper watershed. As noted above, landowners in these areas will be encouraged to manage their lands to support the habitat and water quality values of the Greenway Vision Plan.

Town of Loomis Considerations

There are creek corridors in the Town of Loomis that are identified by the aforementioned corridor types. These are:

- Antelope Creek north of King Road: **Habitat only**
- Antelope Creek between King Road and Sierra College Boulevard: **Recreation**
- Antelope Creek south of Sierra College Boulevard: **Habitat Only**
- Secret Ravine north of Brace Road: **Habitat with recreation potential**

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Secret Ravine south of Brace Road: **Habitat with recreation potential**

The preparers of this report (Town of Loomis Trails Master Plan) conceptually agree with the designations EXCEPT in the location along Antelope Creek between King Road and Sierra College. Given that this potential trail does not connect to a greater trail system (except as a short cut route for users of the Sierra College Class 2 bike lane to King Road) we see little benefit from securing this area for a trail system, UNLESS the area between the creek and Sierra College Boulevard could be someday converted into a park.

The trail location designated south of Brace Road along Antelope Creek also raises issue with the feasibility of this route given that the City of Rocklin currently (2009) does not have plans to designate a bike or trail route of any kind in the previously approved Croftwood Development Project. Negotiations with many private property owners would also be needed to secure an acceptable location along the top of the creek bank. It is possible that a trail through this area could be designed to turn west to Dias Lane, returning back to Brace Road, thereby providing a continuing circuit within the Town of Loomis.

Node Locations

Five types of nodes are proposed within the Greenway, ranging from small, local neighborhood access nodes without parking to large regional access facilities with parking, restrooms, signage and potentially picnic facilities or other amenities. These nodes are located where roads intersect the Greenway corridors.

Town of Loomis Considerations

There are three nodes proposed in the Town of Loomis area.

- Antelope Creek at King Road: Neighborhood Node – no parking
- Antelope Creek at Sierra College Boulevard: Small Community Node – with parking

Secret Ravine at Brace Road: Neighborhood Node – no parking

As noted before the preparers of this report do not believe the Antelope Creek corridor provides a good opportunity for a connective trail system UNLESS the area located along this part of the creek is used as some sort of park land. There-

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fore, a node at either location along this creek corridor is not endorsed.

Trail and Bikeway Standards

Both paved and unpaved trails are proposed or recommended within the Greenway Vision Plan.

- *Paved trails are ten feet wide Class I bikeways suitable for bicycles, pedestrians and other non-motorized traffic.*
- *Unpaved trails are suitable for off-road bicycles, pedestrians, non-motorized traffic and, where permitted, equestrians.*

In some cases, the paved and unpaved trails may be located adjacent to each other in the same corridor.

Town of Loomis Considerations

There are no special considerations concerning this policy.

Paved Bike / Pedestrian Trails

Off-street Class 1 bike trails are identified by:

- *Path separated from the street system*
- *Exclusively for bicyclists, pedestrians and motorized scooters that travel less than 5 mph*
- *Minimum width of 10 feet with 2 foot graded shoulders on each side. These shoulders provide recovery space to the path and must be clear of obstacles.*

The Greenway Vision Plan includes the following additional recommendations:

- *Striping should be used to indicate traffic lanes*
- *Because the bicycle system also functions as emergency access for vehicles such as utility/maintenance and fire control, paths should be designed to accommodate these vehicles with respect to turning radii, grades, etc.*
- *Rules of the road should be published that indicate right of way (see standards section which follows)*
- *Where the trail is adjacent to an incompatible land use, a berm or combination of berm and planting should be used to visually and spatially separate the trail from the adjacent use. In many circumstances, a trail is seen as a highly desirable amenity to a residential community, and residents*

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often install gates in their backyards for more convenient access. However, in some areas, residents may be sensitive to public access or view issues. In these cases, a berm may also be used to separate paved trails from private residential backyards.

Combined Trails

Combined trails are located within the Greenway outside of the City of Roseville in areas where equestrian trails are indicated as proposed on the Loomis Basin Horseman's Association (LBHA) map or recommended by the Greenway Vision Plan. In addition to the trails proposed on the LBHA map, the Greenway Vision Plan recommends equestrian trails be developed along the creeks where the trails will connect to the larger equestrian trail network in two locations: lower Dry Creek from the Placer-Sacramento County line to the Atkinson Road crossing, and upper Secret Ravine from King Road to China Garden Road. The Dry Creek connection will extend the equestrian trail in the Dry Creek Parkway four to five miles into Placer County. Nodes at both ends of this trail provide equestrians with parking and access to this trail segment. The Secret Ravine trail is within a "Habitat with Potential Recreation" corridor, and would require acquisition of properties or easements to create this connection. It connects to the existing unpaved multipurpose trail on King Road and provides equestrian access to approximately 4.5 miles of the Greenway along Secret Ravine.

These combined trails are similar in design to bike/pedestrian trails, except for the addition of a six to eight foot unpaved equestrian trail. This trail should be separated from the bike path by an unpaved strip that is planted with native grasses or perennials, where sufficient easement width is available. If space is not available, the equestrian path can abut the pedestrian path.

Town of Loomis Considerations

It should be noted that as of September 200, the City of Rocklin did not have plans to include any type of trail through the Croftwood Development Project located along Secret Ravine immediately south of the Town of Loomis. Therefore, any bike/pedestrian/equestrian trail will lack connectivity between any planned trail south or north of this area. It is advised that the Town of Loomis discuss this issue with the City of Rocklin in an effort to encourage the devel-

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oper of Croftwood to consider trail opportunities through their project.

Unpaved Multipurpose

Unpaved multipurpose trails are dirt paths used for walking, jogging, mountain biking, horseback riding and other non-motorized off-road activities. These trails are typically six to eight feet wide with a three-foot security buffer on either side. This buffer should be clear of obscuring vegetation (not including tree trunks) from three feet to eight feet high to provide a greater feeling of security to trail users.

The “Habitat with Potential Recreation” corridors are appropriate places for unpaved multipurpose trails, if private property owners are amenable to public access. There are also areas in the “Habitat Only” corridors where unpaved trails may be located such as already exists in the Miners Ravine Nature Preserve. These trails may have different rules from the larger Greenway system depending upon programmed uses; for example, a recreational trail in the Greenway may allow mountain bikes, but an unpaved trail in a nature reserve may only allow pedestrians.

Unpaved multipurpose trails in the Greenway may represent a transitional phase. For example, any Greenway trail may be developed as an unpaved path following acquisition of easements or property but before funding is secured for construction of a paved bike/pedestrian or combined trail.

Town of Loomis Considerations

The Secret Ravine Creek corridor within the Town of Loomis is identified as an opportunity for this type of trail. However, as mentioned earlier, the potential lack of connectivity through the City of Rocklin may make the section south of Brace Road less of a priority as trail development opportunities are identified.

Trail Connections

Trail connections within the Greenway occur where bikeways from the local community roads cross the Greenway. Sometimes, a node may be located at these intersections, in which case signage associated with the node will provide directions; otherwise, signage at the trail crossing will provide directions and

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indicate the Greenway route.

Trail crossings may be at grade or grade-separated, depending upon local topography and presence of bridges. If grade-separated, appropriate transitions must be made between trails. If at-grade, stop signs should be used to control bicycle traffic, unless a road is also present, in which case traffic signals may be appropriate, depending upon the volume of traffic.

In areas of the Greenway where a trail connection is needed through private property, and easements or acquisition cannot be obtained, the route may use local streets to bypass the inaccessible properties. If this is done, the connecting trail should be separated from the street with a planted buffer strip.

Town of Loomis Considerations

Antelope Creek intersects with Sierra College Boulevard, and Secret Ravine intersects with Brace Road in the Town of Loomis. Under-crossings of these roads are not practical due to the lack of clearance between the creek and culvert / bridge structures. Therefore, special consideration is needed to create a safe environment for pedestrian/bike/equestrian crossing. Safety features might include warning signs to drivers, stop signs for corridor users, cross walks with stop vehicle lighting.

Stream Crossings

There will be places in the Greenway where it is necessary for the trails to cross the stream. This may be due to the location of publicly owned parcels, a negotiated easement, a connection to a local or regional bikeway, access to a node, or where the trail leaves the creek. Stream crossings may be low-flow or above-channel.

Low-flow crossings typically entail a low bridge or weir structure over which the trail passes. A bridge is the preferred, though higher cost option due to its lesser impact on fish migration and stream-flow. If a weir is used, the stream usually passes through one or more culverts. Whichever structure is chosen, it is designed to be inundated when the stream is swollen with stormwater runoff. This usually works well in a bike trail system on the West Coast, because trail use is often minimal in the rainy season, especially during or shortly after

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storms when the stream banks are likely to be full. Costs are also lower for a low-flow structure than for a standard bridge; however, these systems can carry a higher liability unless controls are installed to close the trail or inundated trail segments during wet weather. Bridges located above the channel avoid these problems. However, these structures should be designed to avoid inundation during high-flows.

Town of Loomis Considerations

The preparers of this report (Town of Loomis Trails Master Plan) agree with this policy.

Road Crossings

Roads and railroads crossing the Greenway and vehicular bridges over the streams pose a challenge to trail development within the Greenway. Each crossing must be studied to determine if the trail can go under, over or through the crossing. Routing of trails under bridges is often the preferred option, if feasible, because it interrupts the trail experience less, avoids conflicts between trail users and automobiles, and is often the lower cost alternative. Under-bridge trail crossings are likely to be low-flow routes, because they have to descend the stream bank to clear the bridge, and thus become inundated during large storm events when the creeks are swollen with rainwater.

Town of Loomis Considerations

Antelope Creek intersects with Sierra College Boulevard, and Secret Ravine intersects with Brace Road in the Town of Loomis. Under-crossings of these roads are not practical due to the lack of clearance between the creek and culvert / bridge structures. Therefore, special consideration is needed to create a safe environment for pedestrian/bike/equestrian crossing. Safety features might include warning signs to drivers, stop signs for corridor users, cross walks with stop vehicle lighting.

Coordination with Private Property Interests

The Dry Creek Greenway Regional Vision stresses the concept of willing land-owner participation. It is not the intent of the Regional vision to recommend a trail through private property in which the land owner is unwilling for this to

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happen; rather, it identifies desired trail connections and potential trail routes. It is left until the implementation phase of the Greenway to negotiate with individual land owners to determine if the suggested routes are feasible, and if these alignments do not work, to reroute the trail using local streets where possible.
(Page 8)

Town of Loomis Considerations

The preparers of this report (Town of Loomis Trails Master Plan) agree with this policy and encourage the Town to work with willing land owners or to include trails facilities (where applicable) into the design of property that is proposed for future development.

Key Positive Corridor Attributes

Valuable riparian vegetation and the 100-year floodplain are protected from development by existing City and County regulations, and because of this, they provide natural open space corridors for trails and wildlife and aquatic species habitat. Additionally, mature, intact riparian vegetation provides an aesthetically pleasing environment for urban residents seeking a respite from the city.

Town of Loomis Considerations

The preparers of this report (Town of Loomis Trails Master Plan) conceptually agree with this attribute and encourage the Town to continue to protect and enhance creek corridors whenever possible in order to enhance the environment and protect the watershed.

Barriers to Trail Development

The primary limiting factors to trail development in the Greenway Vision Plan include physical barriers, financial barriers and social barriers. Physical barriers include features such as road crossings and culverts; private property; habitats for species sensitive to human presence; existing incompatible land uses such as industrial sites, storage yards or any site that poses a hazard to trail users. Financial barriers limit trail development due to the cost of land acquisition, trail improvements and maintenance. Social barriers include negative attitudes of the public towards trails and usage of the Greenway, including the following concerns:

- *Impact of increased usage on habitat*

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Existing Conditions

- *Privacy in residential areas*
- *Respect of private property rights*
- *Fair compensation for public acquisition of desirable lands*
- *Impact of traffic and increased usage on neighborhoods around nodes*
- *Maintenance of trails and nodes*
- *Crime associated with trails and increased access to open space systems*
- *Difficulty in establishing workable partnerships between local governments, business and nonprofit sectors*

The primary social barrier to trail development is private property ownership. Private land holdings far outweigh public land (including the Town of Loomis). In locations where trails are important, but land is owned by private entities, the public jurisdictions may elect to negotiate with private entities to acquire land. This may be through fee-title ownership or purchase of easements. The land in question is often not developable because it is in the floodplain, and may be acquired for a lesser value than developable land. When considering acquisition of private land for a section of trail, it is important to consider the parcels on both sides of the creek and route the trail depending upon the following criteria:

- *Which alignment contains the most public land?*
- *On which bank(s) are the existing trails located?*
- *Where are the willing property owners?*
- *Can the trail cross the creek to take advantage of willing property owners or public land?*
- *What are the associated costs in environmental and financial terms?*
- *Which local streets can be used to make the desired connection in the event a route cannot be negotiated along the creek?*
- *If willing property owners exist, are they interested in negotiating a fee-title sale or an easement?*

Town of Loomis Considerations

The preparers of this report (Town of Loomis Trails Master Plan) conceptually agree with this policy and see this issue as the single biggest issue concerning the development of trails along open space creek corridors.

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Existing Conditions

Compatibility of Land Use with the Greenway Concept

The upper areas of the watershed (including the Town of Loomis) are dominated by large lot land uses, primarily low density residential and vacant land, with a scattering of agricultural uses. These types of land uses generally offer greater opportunities for easement or property acquisition than the smaller lots in the lower watershed because the local jurisdictions only have to negotiate with one land owner rather than many. Additionally, large lot properties often undergo development as land values increase as a result of economic growth in the County. The permitting process that is a part of development presents opportunities for designation of open space and construction of trails. Furthermore, it may be easier to convince several large lot property owners to properly care for their riparian and aquatic resources than many small lot residents. The primary constraint presented by the upper watershed land use patterns is that little open space is currently designated in these areas. This means that easements or property will need to be acquired if any trails are to be constructed in the upper watershed.

Town of Loomis Considerations

The preparers of this report (Town of Loomis Trails Master Plan) conceptually agree with this policy and see this issue as the single biggest issue concerning the development of trails along open space creek corridors.

Potential Greenway Implementation Strategies (applicable to the Town of Loomis)

Vision Statement 5.0 *Provide for the integration of active and passive recreational uses that will have minimal impacts on the natural resources.*

- *Develop appropriate continuous facilities for bicycle, equestrian, and pedestrian use throughout the Greenway compatible with open space and natural resource protection.*
- *Limit impacts of recreation on sensitive habitats by use of signage, plantings, post- and-cable fencing or other control measures.*

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Existing Conditions

- *Limit all trail users including equestrians, pedestrians, and bicyclists to designated trails.*
- *Prohibit motorized off-road vehicle use within the Greenway and restore habitat in areas of unauthorized historical off-road vehicle use.*
- *Where practical, trails should be combined with tire breaks and maintenance roads and surfaced with the most suitable materials to minimize impact on vegetation and other natural resources.*
- *Design paved bicycle trails to be compatible with the Caltrans standards when feasible and to include shoulders for pedestrian use.*
- *Where site conditions allow, design Parkway facilities at a minimum to accommodate access for people with disabilities as required by the Americans with Disabilities Act of 1990.*
- *Encourage the development of Greenway pedestrian, equestrian, and bicycle trails that provide connections with nearby communities. Whenever possible, locate these connecting trails off-street.*
- *Wherever possible, design mass transit routes and stops to provide public access to the Greenway, preferably at designated trail entry locations.*
- *Develop a comprehensive interpretive and informational signage program to communicate proper use of trails, access restrictions, routes and connections, safety issues, and habitat protection considerations.*

Vision Statement 8.0 *Coordinate with agencies and jurisdictions to secure adequate funding and resources to sustain and complete implementation of the Greenway.*

- *Encourage Greenway jurisdictions to collaborate with each other and other regional partners to identify and apply for appropriate local, state, and federal grant funds that would be used to support Greenway implementation,*

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Existing Conditions

maintenance, and operations.

- *Build private/public partnerships to pursue funding for Greenway initiatives from a variety of sources.*
- *Seek contributions from community interest groups to supplement and enrich interpretive and public access programs, where possible.*
- *Identify and incorporate appropriate revenue generating opportunities. Appropriate activities are those that do not adversely impact the Greenway resources or otherwise conflict with the vision expressed in this document.*
- *Develop mitigation opportunities within the Greenway to encourage the enhancement and restoration of natural open space areas. All mitigation projects within the Greenway are to be consistent with the Greenway vision and include provisions for ongoing maintenance.*
- *If feasible, establish a Greenway mitigation fund that will receive in-lieu fees from development projects for which adequate mitigation cannot be implemented on-site.*
- *Pay mitigation fees collected for projects within the Greenway to the Greenway mitigation fund to support implementation of Greenway habitat improvements.*

Vision Statement 9.0 *Propose strategies for immediate and long-term land use planning and management practices within the Greenway.*

- *Encourage the inclusion of policies in new and existing CC&Rs and/or HOA documents to help reduce the adverse impacts to the Greenway resources associated with residential landscape management practices such as the use of invasive plant species, removal of bank stabilizing vegetation, and excessive application of fertilizers and herbicides.*

Vision Statement 10.0 *Promote the Greenway as a local and regional asset*

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Existing Conditions

through collaboration and coordination with regional partners, resource agencies, and public education.

- *Encourage community support of the Greenway through the creation of special interest groups/organizations and special events such as:*
 - *Friends of Dry Creek Greenway*
 - *Greenway Volunteer Patrol*
 - *Adopt-A-Creek Program*
 - *Equestrian and Bike Trail Patrols*
 - *Creek and Greenway Clean Up Day*
 - *Annual Tree Plantings*
 - *Restoration Programs*
- *Provide opportunities and create mechanisms to educate the public on the value of the Greenway and its resources.*
 - *Develop and coordinate educational outreach programs through local schools, environmental organizations, and special interest groups.*
 - *Establish nature study areas and interpretive centers to facilitate public education.*
 - *Develop a comprehensive interpretive program for the entire Greenway to provide for a continuous, integrated educational experience for visitors to all parts of the Greenway. This program should include such features as: signs, exhibits, nature trails, guided walks and tours, publications and media, and research.*
 - *All signs (e.g., interpretive, informational, directional, etc.) in the Greenway shall have consistency of design, color and materials and shall blend with the natural environment.*
 - *The design and placement of all signs shall consider access for people with disabilities.*

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Trails Master Plan 3

A. Goals

The goals of the Trails Master Plan include:

- Provide pedestrian, bike and equestrian access through natural areas.
- Provide supplemental pedestrian and bike access to the Town's sidewalk system and bike master plan.
- Improve walkability links to schools.
- Provide connections to the County of Placer's proposed network of multi-use trails.

As noted in the Existing Conditions chapter, the Greenway Vision Plan establishes a fair amount of policy for potential trails that cross through the Town of Loomis.

B. Trail Users

All trails shall be designated as multi-use providing opportunities for a combination of pedestrians, bicyclists, and/or equestrians. No motorized vehicles except authorized trail maintenance vehicles and emergency vehicles shall be allowed on the trails. Should conflicts arise on specific trail segments in the future, the Town may restrict the use on certain segments to avoid environmental degradation, conflicts with properties adjacent to the trail, or trail user conflicts.

C. Policy Standards for Trail Design

The following policy standards for trail design are recommended for the Town of Loomis Trails Master Plan. Implementation of these standards will provide consistency to the trails within the Town.

1.0 Environmentally Sensitive Design

- Design trails to avoid high-quality habitat areas to minimize impacts to sensitive vegetation.
- Provide fencing, cable and post barriers to discourage trail users from venturing into sensitive areas.
- Provide signage alerting users to the sensitive nature of a specific area.
- Provide appropriate native vegetation along trails to mitigate trail development impacts.

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Trails Master Plan

2.0 Trail Signage

- Provide trail signage at nodes to indicate who has right-of-way on the trails between bicyclists, pedestrians and equestrians.
- Provide directional signage at trail intersections.
- Provide signage clearly stating the rules of the trail. This includes dog policies, motorized traffic restrictions, etc.
- Design and incorporate a common element into signage to indicate trails. This element might be a logo or other design unique to the Town of Loomis.
- Design signage to meet ADA requirements (where appropriate).
- Provide interpretive signage where appropriate at nodes, overlooks and other significant sites. These sites may include historically or pre-historically significant locations, wetlands or sensitive habitats, local wildlife that trail users might encounter, etc. Design interpretive signage to meet ADA requirements (where appropriate).

3.0 Emergency Access

- Design trails for emergency vehicle access, a minimum of 10 feet wide with minimum curve radii of 45-feet. 12-foot wide paved routes are recommended by Caltrans in areas where heavy bicycle or pedestrian traffic is anticipated. Paved paths that are less than 12-feet wide are also more vulnerable to degradation of pavement edges due to wear by maintenance and emergency vehicles.

4.0 Safety

- Provide striped, separated lanes for pedestrian / bike traffic control, where possible.
- Provide flashing light crossing signals at intersections of roadways and trails in order to allow safe crossing.
- Provide regular safety patrols of trails.
- Keep trails free of debris and maintained on a regular basis.
- Provide fencing and safety barriers where appropriate to keep users on the trail.

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Trails Master Plan

5.0 Accessibility

- Where feasible, design all improved pedestrian, bicycle and combined trails to meet ADA requirements. Unpaved trails will not meet universal accessibility standards.

6.0 Diversity

- Provide a diversity of riding and walking experience by varying the ecosystems through which the trail travels. Take advantage of ecotones (transitions between ecosystems) to create an interesting experience for the trail user. Create overlooks at scenic locations on the creek or surrounding landscape.
- Trails should connect to or be supplemental to a network of sidewalks throughout the Town area, specifically in the Downtown.

7.0 Avoid Dead End Trails

- Avoid trail dead-ends, especially where a trail terminates in a private parcel. This encourages trespassing. Instead of creating a dead-end, identify a nearby road or other circulation element and connect the trail to that system. Ideally, the connection would be to a road that has an existing bike route. If that is not available, a road that has a proposed bikeway is preferred.

8.0 Sound / Visual Barriers

- Where a trail is adjacent to residential or industrial uses, provide a minimum 6-foot high barrier to separate the trail from the adjacent land use. This barrier might take the form of a berm, or a berm and plantings, or a sound wall.

9.0 Equestrian Trail Design

- Promote separation between equestrian and bike / pedestrian trails whenever possible in order to mitigate conflicts.
- Encourage equestrian trail connections to and from the Loomis Basin Park (County of Placer Facility) via open space corridors along Secret Ravine Creek.
- Encourage opportunities to link the Loomis Basin Park equestrian facility with the XXXX facility located north west of the Town.

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Trails Master Plan

- Discourage equestrian trails directly into the downtown area.
- Coordinate efforts with local equestrian clubs (IE Loomis Basin Horseman's Association) to identify potential trail opportunities across private property.
- Provide signage along specific roadways (Sierra College Boulevard, Taylor Road, King Road, Horseshoe Bar Road, Barton Road) where equestrians are likely to ride along shoulders in lieu of a separate trail. Signs would warn motorists of equestrians sharing the road (IE "Share the Road with Horses")
- Provide parking lots designed for equestrian trailers in order to safely accommodate loading and unloading at trail nodes.

10.0 Maintenance

- Provide yearly, semi-annual, and regular maintenance schedules for trails in order to keep vegetation cut back, repair surfaces, and keep trails swept clean of debris that could be hazardous to users.
- Establish a maintenance impact fee or district on future development properties that contain trails.

D. Proposed Trail Routes

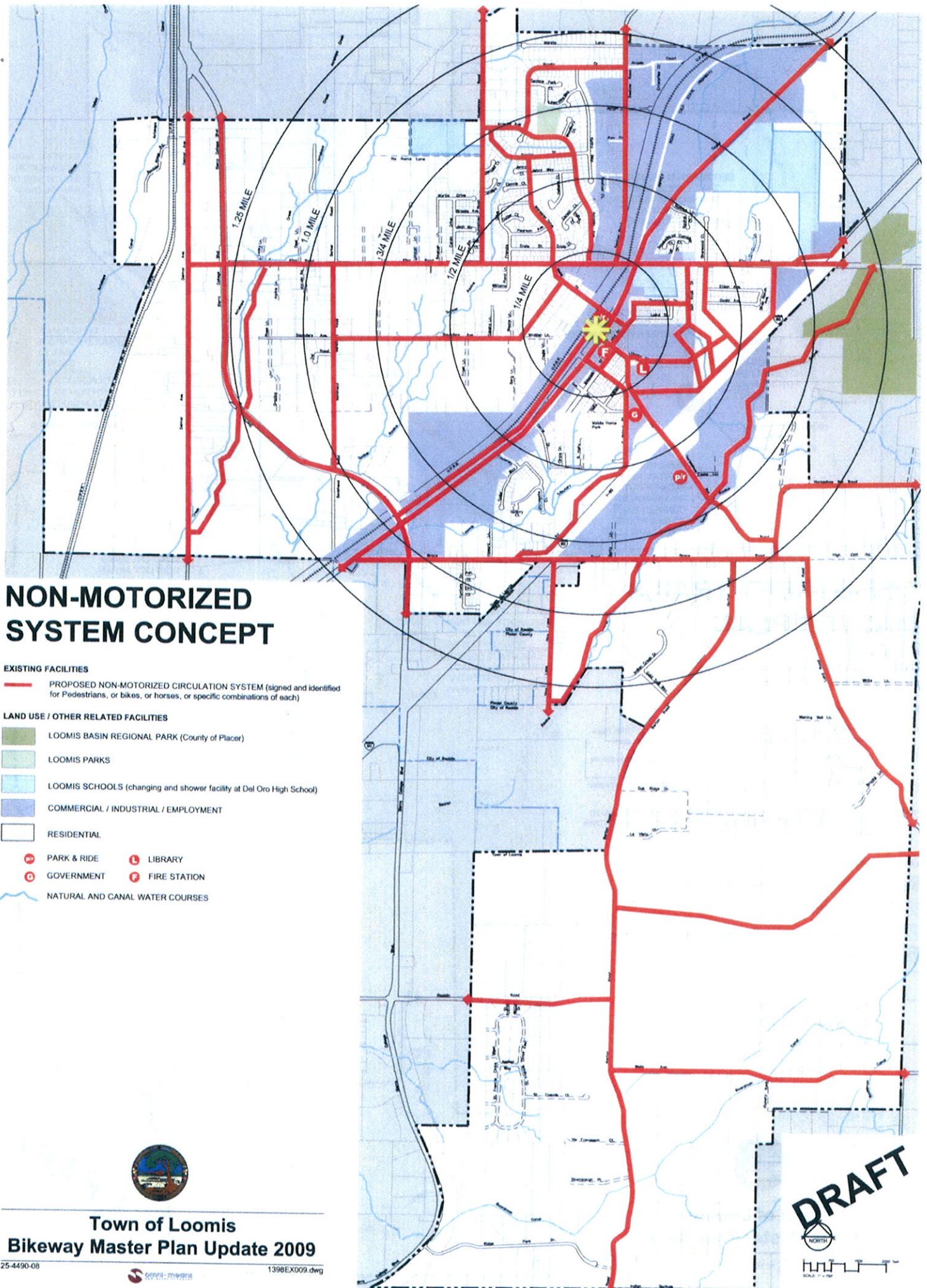
This Trails Master Plan recognizes that opportunities for "traditional" off-road trails is limited. With the possible exception of two open space corridors along Antelope Creek and Secret Ravine Creek, trail opportunities may only occur in new development areas. Therefore, this plan encourages the Town to consider trails as apart of a non-motorized system that includes:

- Off-road multi-use trails,
- Bikeways,
- and sidewalks.

As noted on the Figure x the major and minor streets in the Town of Loomis connect to a Central Core area near the intersection of Horseshoe Bar Road and Taylor Road. However, access along these roads by pedestrians and bicyclists is limited due to the current (circa 2009) inconsistent nature of the bikeways and sidewalks.

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NON-MOTORIZED SYSTEM CONCEPT

EXISTING FACILITIES

PROPOSED NON-MOTORIZED CIRCULATION SYSTEM (signed and identified for Pedestrians, or bikes, or horses, or specific combinations of each)

LAND USE / OTHER RELATED FACILITIES

- LOOMIS BASIN REGIONAL PARK (County of Placer)
- LOOMIS PARKS
- LOOMIS SCHOOLS (changing and shower facility at Del Oro High School)
- COMMERCIAL / INDUSTRIAL / EMPLOYMENT
- RESIDENTIAL
- PARK & RIDE
- LIBRARY
- GOVERNMENT
- FIRE STATION
- NATURAL AND CANAL WATER COURSES



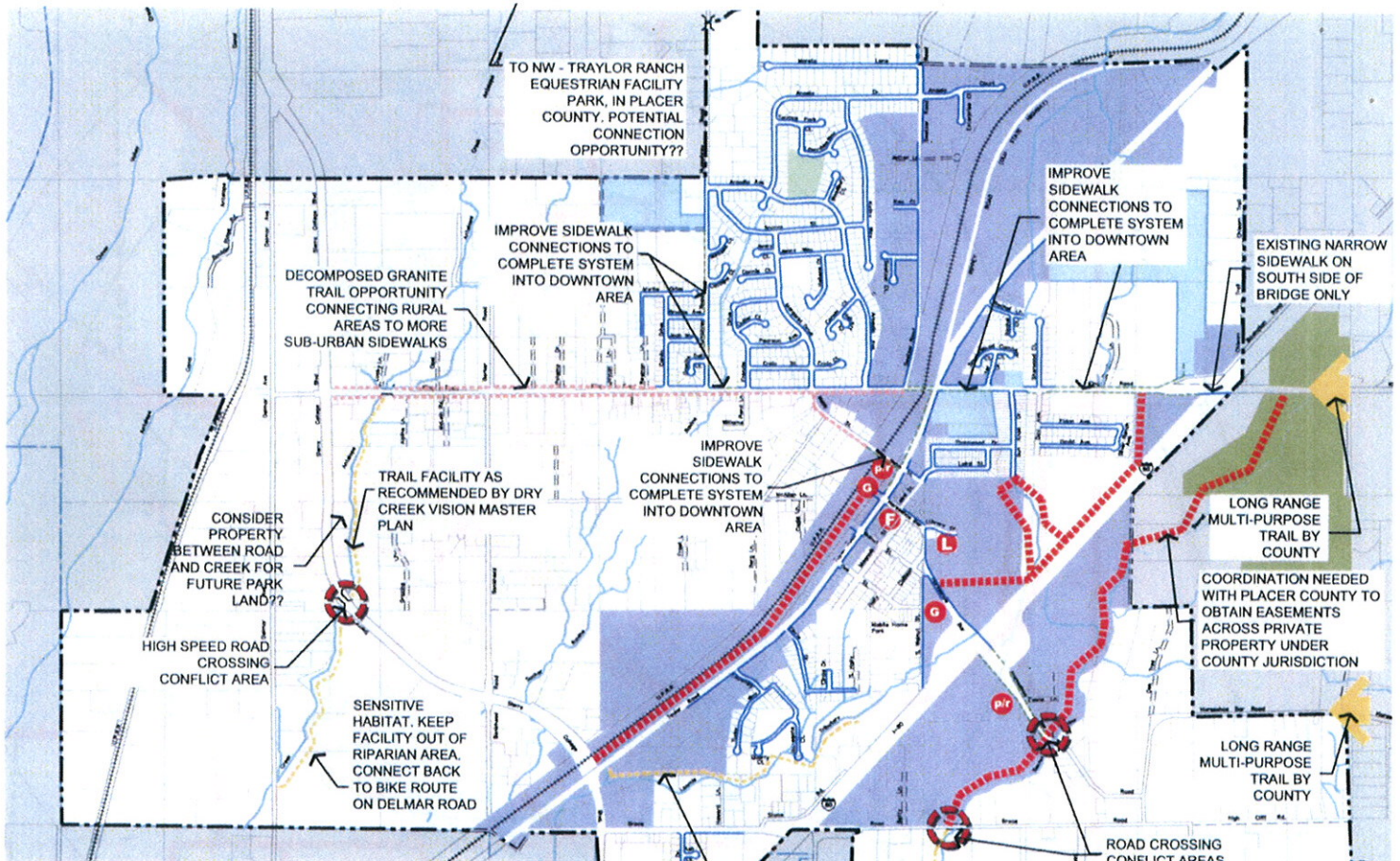
Town of Loomis
Bikeway Master Plan Update 2009

25-4490-08



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OFF-STREET TRAILS MASTER PLAN

EXISTING FACILITIES

- ON-STREET CONCRETE SIDEWALK
- OFF-STREET MULTI-USE SOFT SURFACE PATH

PROPOSED FACILITIES

- HIGH FEASIBILITY OFF-STREET MULTI-USE HARD SURFACE TRAIL (Bike and Pedestrian Only) Resulting from location in future development area.
- LOW FEASIBILITY OFF-STREET MULTI-USE TRAIL - Across multiple private residential properties
- OFF-STREET MULTI-USE SOFT SURFACE TRAIL (Equestrian and Pedestrian Only)
- ON-STREET PEDESTRIAN SIDEWALK - DEVELOPMENT OF SIDEWALK TO SERVE AS A BACK BONE PEDESTRIAN CONNECTIVE SYSTEM INTO TOWN CENTER

LAND USE / OTHER RELATED FACILITIES

- LOOMIS BASIN REGIONAL PARK (County of Placer)
- LOOMIS PARKS
- LOOMIS SCHOOLS (changing and shower facility at Del Oro High School)
- COMMERCIAL / INDUSTRIAL / EMPLOYMENT
- RESIDENTIAL
- PARK & RIDE
- LIBRARY
- GOVERNMENT
- FIRE STATION
- NATURAL AND CANAL WATER COURSES



Town of Loomis Trails Master Plan 2009

25-4490-08



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Trails Master Plan

Figure X illustrates proposed off-road (sidewalks or multi-use paths) improvements that will fill in the blanks and provide connectivity between all areas of the Town of Loomis.

When combined with bikeway improvements (see Town of Loomis Bicycle Transportation Plan - 2009 document) the system will provide the opportunities for residents, both old and young, to circulate through town without having to use a car.

E. Specific Improvements

The following specific improvements are recommended to provide pedestrian or equestrian connectivity throughout the Town of Loomis.

- Install sidewalks along King Road to connect Arcadia Avenue to Taylor Road
- Construct a multi-use path in the area along the railroad right-of-way between Taylor Road and the railroad tracks. This path should continue south behind the retail district and connect to Sierra College Boulevard and to the sidewalk system along Taylor Road in front of the retail businesses. As of this writing, this path is being considered in a redevelopment design study promoted by the Town of Loomis.
- XXXXXXX
- XXXXXXX
- XXXXX
- XXXXXX

F. Design Standards

Paths and trails included in the Master Plan shall be developed in accordance with the following standards. In certain locations where physical or environmental constraints preclude the practical implementation of a path or trail under the following standards, the Town of Loomis reserves the right to modify the standards in order to preserve the continuity of the system, avoid or minimize environmental impacts, and preserve community character.

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Trails Master Plan

Deviations from the standards are subject to the approval of the Town of Loomis. These modifications will be made only after a determination is made that public safety or environmental resources will not be impacted. Although the plan endeavors to provide standards for all conceivable occurrences, it is impossible to ensure that every detail will be addressed. Therefore, site specific conditions may dictate the redesign or refinement of standards to meet unusual field circumstances.

The purpose of the Trail Standards are to:

- Ensure trail safety by:
 - minimizing trail hazards, including natural & vehicular interface;
 - minimizing trail deterioration; and,
 - providing for adequate surveillance to reduce crime and vandalism.
- Protect the rights of adjacent landowners, thus making the trail a sought after amenity.
- Minimize maintenance costs.
- Provide for a consistent trail identity that maintains the unique flavor of each neighborhood yet presents a cohesive trail system.
- Avoid or minimize disturbance to the natural environment.
- Maximize the enjoyment of users through a diversity of experiences.
- Reduce liability exposure to the Town of Loomis.

GRADE: Trail segments shall be 12% or less. However, slopes above this for short distances will be allowed using the following requirements:

- Under most all circumstances slope should not exceed 20%.
- 15% to 20% slopes should be no longer than 250 feet with 10 foot long breaks in grade which do not exceed 5%.
- 12% to less than 15% slopes should be no longer than 500 feet with 10 foot long breaks in grade which do not exceed 5%.

CROSS GRADE: Should not exceed 2%. Low grades help prevent drainage problems; steep grades allow the water to run faster, building up erosive force. See details for typical cross-sections and drainage requirements.

GRADING: Hillside trails should be benched into native material. Trails proposed to be constructed on fill slopes will be allowed only with the recommen-

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Trails Master Plan

dation of a registered civil or geo-technical engineer. Drainage and grading design plans shall be submitted to the Town by a registered civil engineer or landscape architect.

SIGHT LINES & CURVATURE The design speed for trail travel should not exceed 10 miles per hour. With this assumption, sight distance should be no less than 50 feet.

VERTICAL CLEARANCE: 15 feet minimum beneath structures or tree limbs.

SURFACING: Paths should be designed to maintain the rural feel of existing streets and shall be designed and constructed in as natural a condition as possible. Surfacing will be selected, on a case by case basis, to provide flexibility in determining which surfacing is the most compatible with the character of



a specific trail. Appropriate surface materials could include, but would not be limited to, asphalt, earth toned colored concrete, native soil, soil cement, or compacted decomposed granite.

SOFT TRAIL SURFACING: Where soft trail surfacing is to be decomposed

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Trails Master Plan

granite, installed as follows: Scarify tread areas to a depth of 6 inches removing rocks, clods and all undesirable materials. Fine grade and compact native soil to a 90% relative compaction as determined by A.S.T.M.-1557-78. Evenly spread 4-inches (minimum) of decomposed granite (crushed or decomposed granite with maximum 1/4 inch diameter particles). On the approval of the Town, native soil may be substituted for the decomposed granite tread, where it is determined that the soil type and the absence of moisture will provide a trail surface that will provide an acceptable tread for users. At road or driveway crossings, pavement, for the width of the trail, shall be rough textured to prevent horses from slipping. Pavement material at road and driveway crossings shall be heavy brushed concrete or other similar material approved by the Town.

WEED CONTROL: As weeds appear, they shall be controlled chemically, mechanically, or culturally. There must be strict supervision of the applicator(s) to ensure that chemical applications are confined only to the trail tread and are applied per State and N.P.D.E.S. (National Pollution Discharge Elimination System) standards. Light mulch, as approved by the Town, may be used on the trail tread to control weeds.

VEGETATION: Vegetation adjacent to the trail tread shall be preserved as much as possible to protect the aesthetic quality of the trail. Vegetation should be cleared to a height of 15 feet and a width of 8 feet within the trail easement. Pruning along trails should be selective. Stumps may be treated to prevent sprouting. Dead and dying limbs and snags which may fall on the trail should be removed. Groundcover plants and low shrubs should not be cleared except from the actual trail tread. Where a trail is on a side slope, the vegetation on the uphill side will be more invasive and should be cut back more severely than vegetation on the downhill side.

FENCING: Trail fencing shall be constructed of a material as approved by the Town, and shall be installed on one side of the trail unless a determination is made by the Town that fencing is not necessary for safety, environmental resource protection, or private property reasons. Fencing may not be necessary or desired where the trail is located in open space areas where a fence would be visually obtrusive to the natural environment, or in less natural areas, where vegetation, non-trail fencing, or other physical features provide adequate de-

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Trails Master Plan



lineation of the trail. Fencing material may include, but is not limited to, PVC, post and rail, peeler poles, or woodcrete. Fencing material should be compatible in character with the physical location of the trail and shall be designed to safely accommodate the expected users of the trail segment.

In general, fences shall be installed:

- in areas where side slopes exceed 3:1;
- on switchbacks in order to prevent short-cutting;
- on the trail side of retaining walls;
- along flood control channels or other hazards; and,
- at street intersections to delineate the trail entrance. The entry fence should consist of a section on either side of the trail tread of two rail segments long

SIGNAGE: Trail markers (See “Trail Marker” detail) shall generally be installed every 1/4 mile. Signage should occur at all street and trail intersections and at trail heads. Trail markers shall have symbol decals affixed to both sides in the same position. Signage should alternate from one side of the trail to the other and signs shall be installed clear of the trail tread. Appropriate warning

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Trails Master Plan

signs should be installed to detail hazards, clearance requirements, approaching intersections, the need to stop or yield, and staging and rest areas. Street signage warning motorists of trail crossings should be located in advance of trail crossings. Signs should meet Town, County and State standards.

BARRIERS: All proposed trails are restricted to use by pedestrians, equestrians and bicyclists only, and can be made difficult for use by motorcyclists by creating a barrier at trail entrances if motorcycle use becomes a problem. The barrier should consist of a treated 2 ½ inch rail set 1 to 3 feet above the ground. Affixed to the barrier should be highly visible reflective materials which will enable trail users to see the barrier at night. The barrier shall be regularly maintained to ensure maximum visibility. These barriers are difficult to cross with a motorcycle, but may be stepped over by hikers and riders. Installation of barriers shall occur where motorcycle use becomes a problem.

CREEK CROSSINGS: On trails & paths which will be utilized by pedestrians, equestrians, and bicyclists, provide a bridge or culvert over creeks or drainages, the design of which shall be performed by a registered engineer using the following standards:

Bridge:

- Width: 8 foot tread minimum.
- Bridge and ramp slopes: 8% maximum.
- Surface or tread: Non-skid or non-slip surface such as wood, textured concrete or asphalt.
- Rails: Install protective side railings.

Culverts:

For small drainages, culvert should have a 12-inch minimum diameter for ease of cleaning. They should have 12-inch minimum cover and be sloped approximately 2%. The size, slope and cover of culverts should be calculated to ensure that the trail is passable at all times. In general the trail tread above the culvert should be a minimum 12-inch deep compacted decomposed granite or native soil. Soil should be protected with rip-rap from concentrated flows, particularly at culvert outlets. Headwalls and outlets should be protected and concealed with boulders where possible

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Trails Master Plan

INTERSECTION DESIGN: The design of intersections where vehicles and the trail interface shall require that both the motorist and trail user are informed of the potential conflicts. "Roadway Intersection Ahead" signs shall be posted to inform trail users that they are approaching a roadway intersection. Signage and road markings shall also be utilized to inform vehicles of the trail crossing. All crossings at grade shall be striped and signed. Slip-resistant paving (such as a heavy broom finished concrete) should be utilized to provide a non-skid surface. This slip-resistant surface shall be subject to the review and approval of the Town. At signalized intersections, trail signage shall be installed advising trail users to wait at the crossing activation button until the signal indicates safe crossing. At intersections where trails cross streets, the Town will review on a case by case basis, any special circumstances in regard to right turn on red which may represent a potential hazard.



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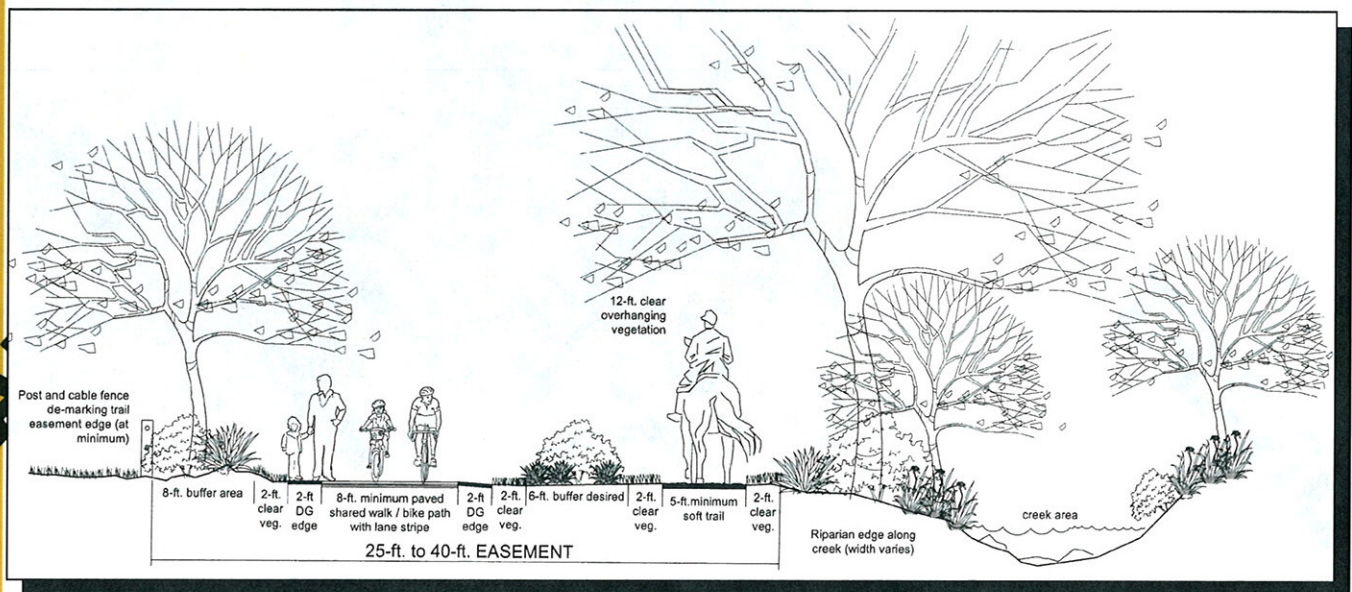
Trails Master Plan

SHARED PEDESTRIAN, BIKE, and HORSE TRAIL EXAMPLE

Opportunities for multi-use trails exist along Antelope Creek and Secret Ravine Creek. However, the land needed to provide access for these proposed trails is currently on private property. Therefore, it is the recommendation of this report that the Town work with developers to acquire easements or dedication of land for trails adjacent to specific areas of land development.

It should be noted that many areas of trail opportunities along the two creeks are along private residential property that border or span the creek watershed. Acquiring easements or dedication on these properties for trails may take a long time and the require purchase of land by the Town in order to control trail development.

The following illustration depicts minimum requirements suggested for the development of a multi-use trail that includes opportunities for pedestrians, bikes, and equestrian use.



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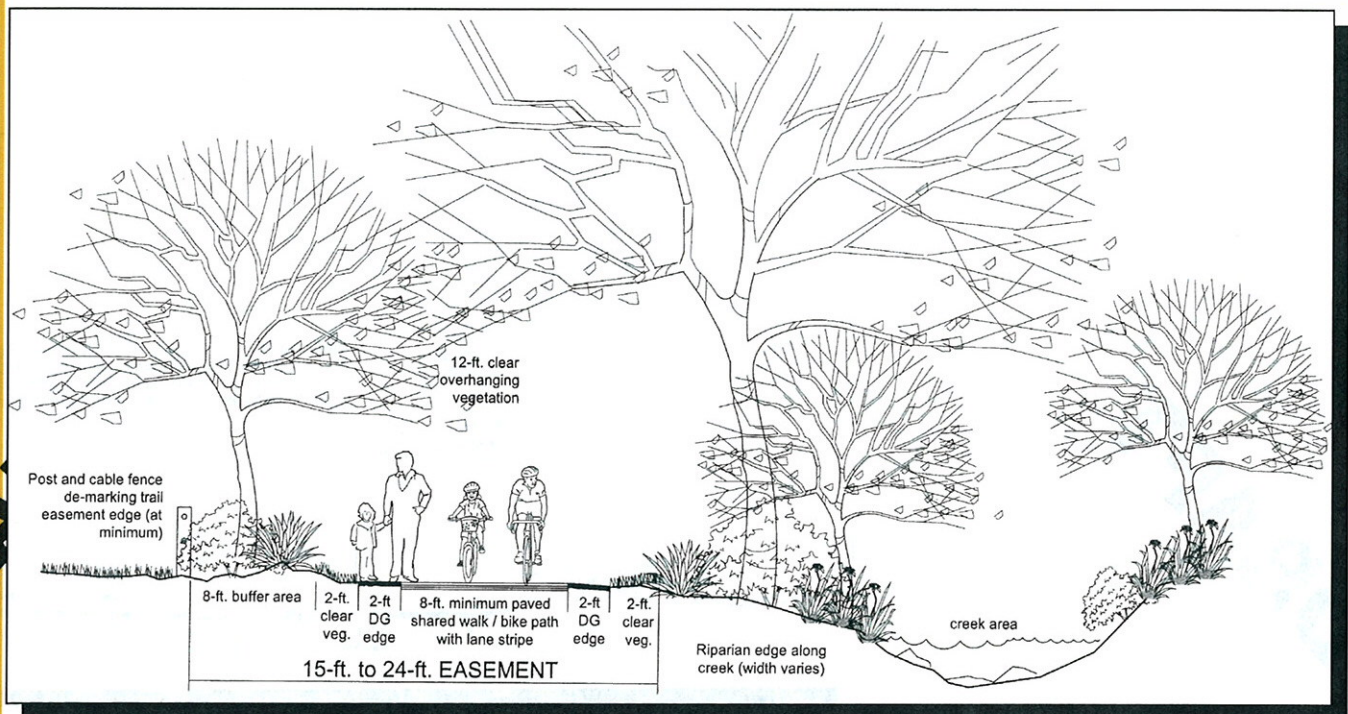
Trails Master Plan

SHARED PEDESTRIAN and BIKE TRAIL EXAMPLE

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The following illustration depicts minimum requirements suggested for the development of a multi-use trail that includes opportunities for pedestrians and bike use.





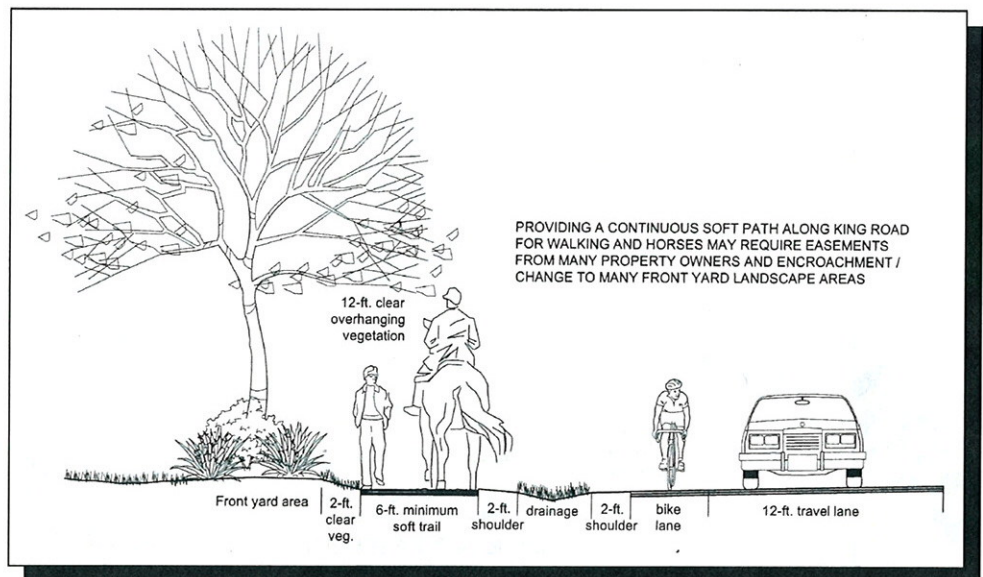
Trails Master Plan

MULTI-USE TRAIL EXMAPLE:

EXISTING ROADWAYS WITHOUT SIDEWALKS

In an effort to encourage a rural nature along existing roadways that link larger residential lots to the more suburban area, considerations should be made to create a “soft” trail that might be separated from the road by a drainage ditch or minor landscape. This trial would provide an opportunity for pedestrians, recreational bicyclists, and equestrians to navigate the road without walking along a dangerous shoulder. A bike lane is encouraged to accommodate the commuter bicyclist.

As illustrated in the example below, the separated path is intended as a low use path where the pedestrian and horse would need to respect each others space when passing.



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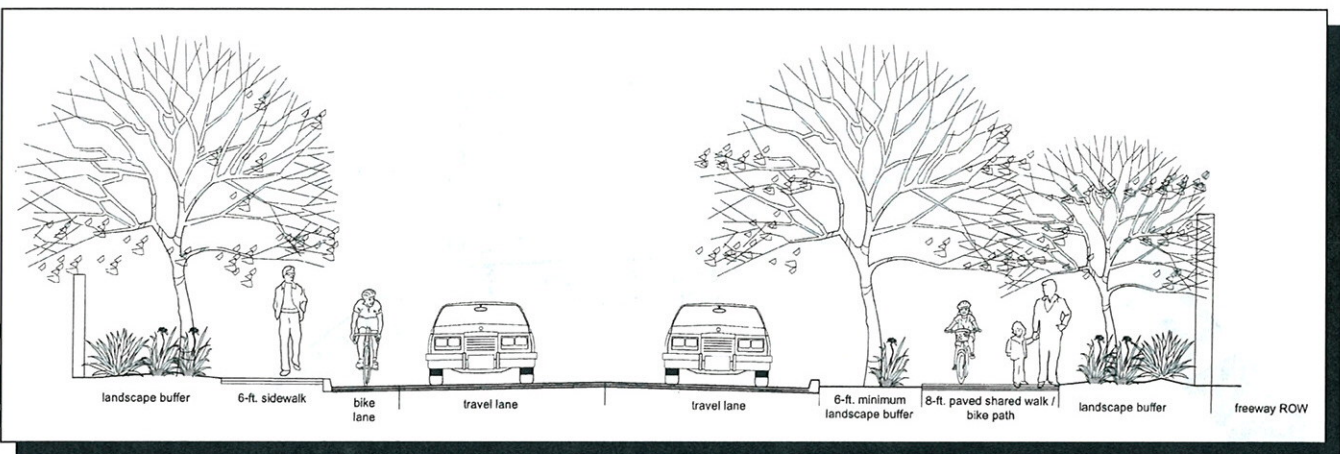




MULTI-USE TRAIL EXMAPLE: RESIDENTIAL DEVELOPMENT

As new master planned development come on-line, there may be opportunities to develop multi-use trails within the collector street right of way. In order to create the best environment for the pedestrian and the bicyclist along the roadway, the separation of sidewalks are encouraged. Where right of way is limited, a combination of sidewalk against the curb on one side, and a separated sidewalk on the other is desired.

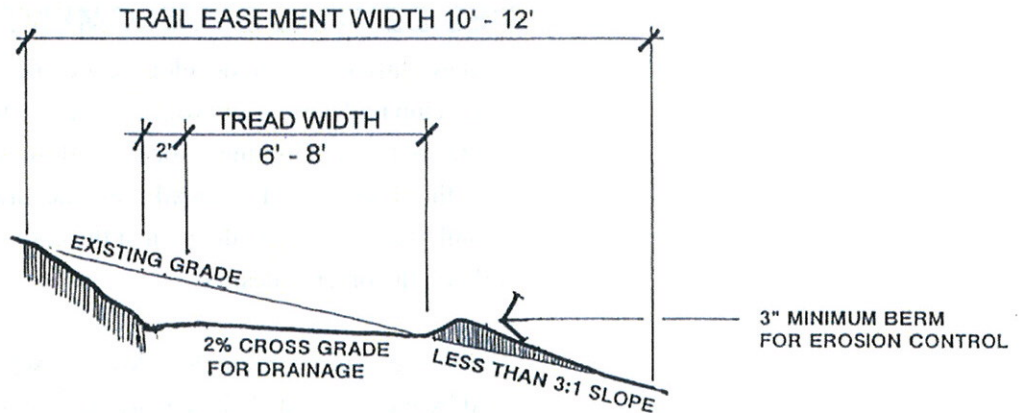
As illustrated in the example below, the separated sidewalk area can also be used by the bicyclist. This scenario removes the bike lane from one side of the road, while keeping it in the road in the other direction. Depending upon the size of the roadway, relationship to open space, and other physical constraints, additional design options might be considered. The developer should be encouraged to incorporate as much landscape and pedestrian / bike space along the collector road as possible to foster a pleasant walking / biking experience.





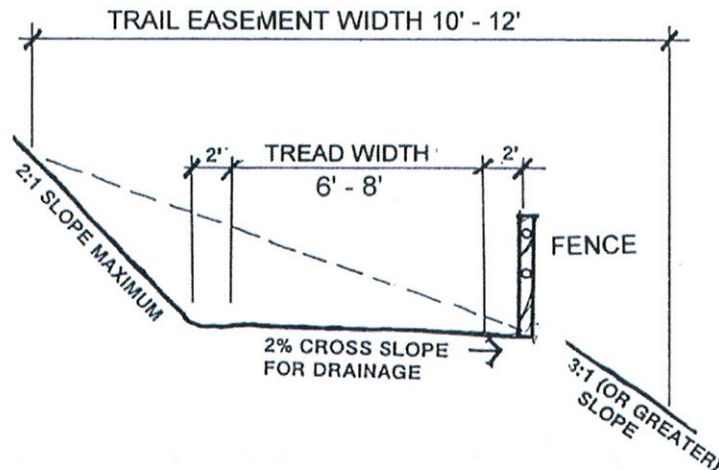
Trails Master Plan

SIDE SLOPES LESS THAN 3:1



DRAINAGE AND IRRIGATION SYSTEMS FOR ALL UP SLOPES SHALL BE DESIGNED TO PREVENT RUN-OFF ON TO TRAIL.

SIDE SLOPES GREATER THAN 3:1



DRAINAGE AND IRRIGATION SYSTEMS FOR ALL UP SLOPES SHALL BE DESIGNED TO PREVENT RUN-OFF ON TO TRAIL.

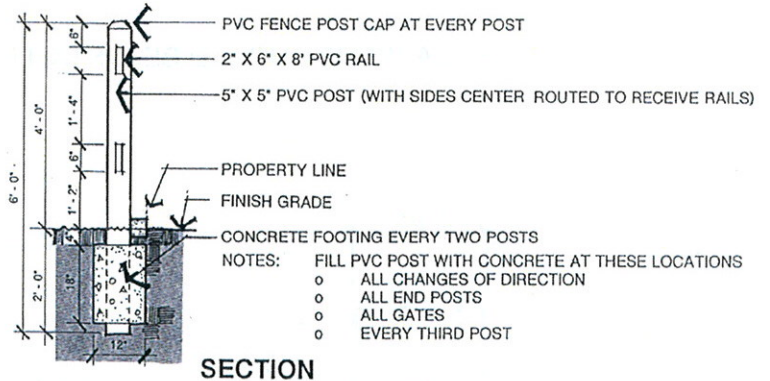
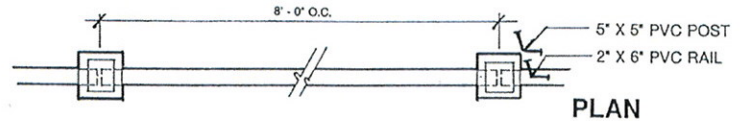
TYPICAL TRAIL SECTION
(Easement width may vary)

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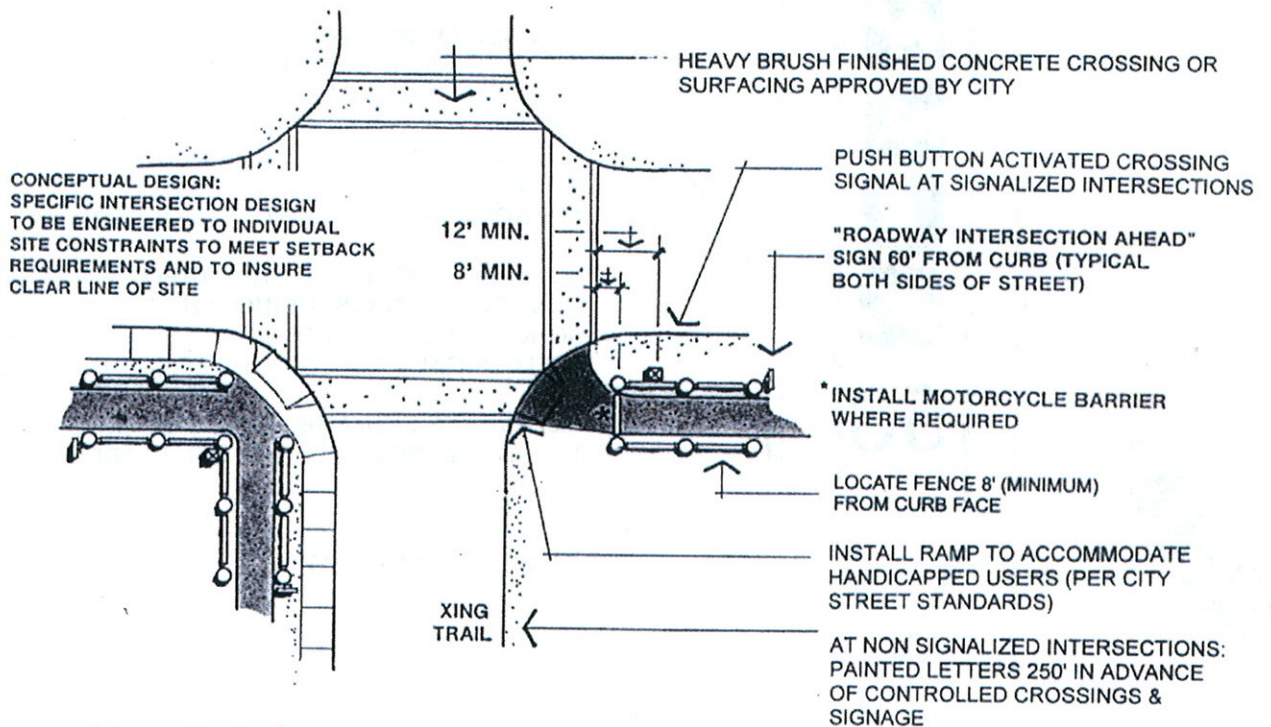


Trails Master Plan



TYPICAL TRAIL FENCING DETAIL

(materials may vary with approval by Town Engineer)



TYPICAL INTERSECTION CROSSING DETAIL

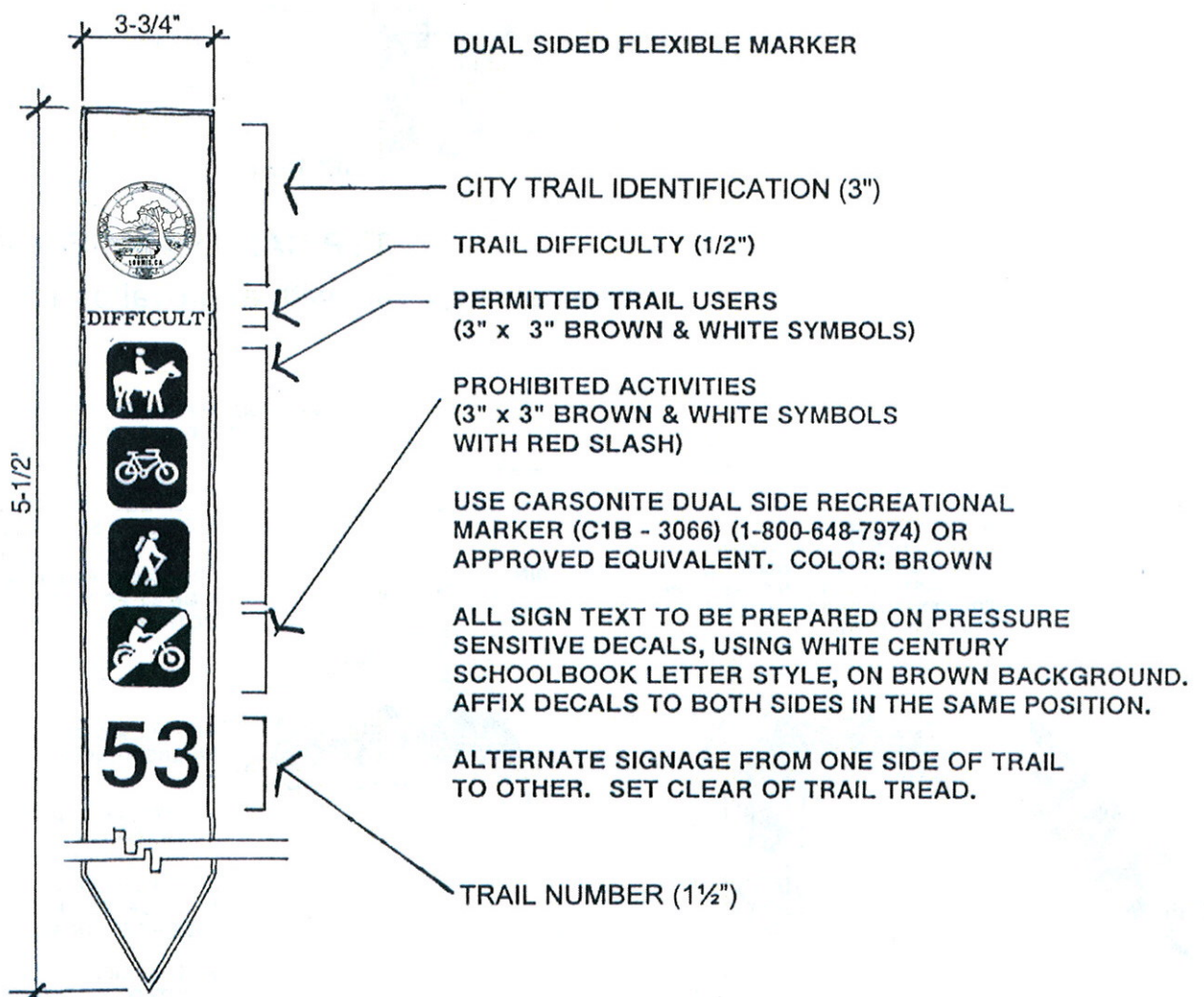
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Trails Master Plan

TRAIL MARKERS SHOULD BE INSTALLED EVERY 1/4 MILE



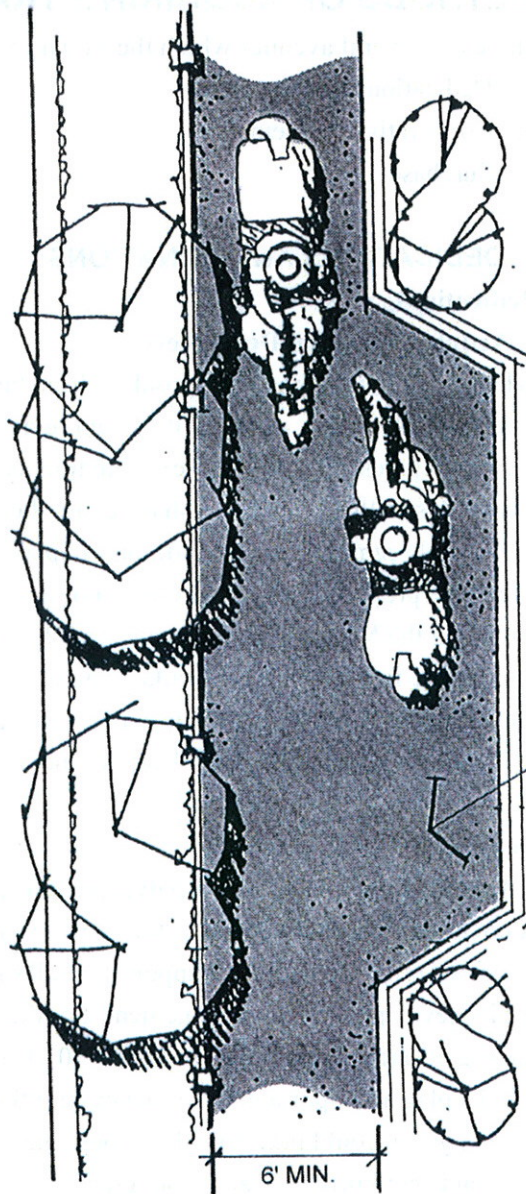
TYPICAL TRAIL MARKERS

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Trails Master Plan



2' X 15' TURNOUT FOR PASSING

INSTALL EVERY ¼ MILE, WHERE
TRAIL TREAD IS LESS THAN 8',
OR AS DETERMINED BY CITY

TYPICAL TRAIL TREAD SHALL
NOT BE LESS THAN 6'
IN ANY LOCATION

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TYPICAL PASSING TRUNOUT ON EQUESTRIAN TRAILS



Trails Implementation 4

In this section, the implementation of the trails plan will be addressed. Included in the analysis will be the various methods of acquiring trail segments, installation responsibility, and phasing.

METHODS OF ACQUIRING TRAILS

There are several avenues which the Town can use to acquire trail segments:

- A. Dedications and Donations
- B. Cooperative Agreements
- C. Purchase

A. DEDICATIONS AND DONATIONS:

Dedications

1. Acquisitions from Developers

Whenever a development proposal such as, but not limited to, a tentative map, tentative parcel map, use permit, design review permit, or coastal development permit includes a proposed or existing trail as identified on the Recreational Trails Master Plan, the Town shall require both the dedication and improvement of the trail segment(s) as a condition of approval if a nexus can be found between the proposed project and the requested trail dedication and improvement. Although the Master Plan delineates trail locations, the specific location of a trail can be fine-tuned on individual parcels to accommodate specific development proposals. However, the trail exit and entry points should be sited consistent with the adopted Master Plan to ensure continuity of the trail system.

Donations

1. Establishing a Non-profit Advocacy Organization

A coalition of trail advocates could organize a non-profit group (ex: "Friends of Loomis Trails") that would support the trail's realization and solicit donations for its development and management. For the sake of fund-raising legitimacy, the organization would need to have a 501-C3 tax status. Land conservation groups play an important constituency-building and watch dogging role as well. Such a group could play a vital and ongoing role in assisting the Town in raising funds both privately and from grants.

2. Service Organizations

Service, community and fraternal organizations can offer volunteer workers for trail construction and maintenance, as well as solicit free or wholesale materials

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Trails Implementation

and construction equipment for trail construction (wood, asphalt, etc.) The Town should encourage groups of this type to join forces to implement the trail system. In addition, the Town could create and underwrite "trail adoption" programs, that enable service and hiking/bicycle clubs to maintain particular sections of the trail.

3. Gifts Catalog

Preparation of a line item "wish list" which could be distributed to service groups and the public would be valuable in securing donations. A description of trail components such as "a half mile of trail along Antelope Creek" and "an interpretive sign for birds found along Secret Ravine Creek" along with their associated costs could be included.

B. COOPERATIVE AGREEMENTS:

The Town should formulate joint agreements with public and private agencies which are responsible for utility corridors to establish permanent trail segments. In Loomis, these would include the Placer County Water Agency, Southern Placer Municipal District (sewer), and Pacific Gas & Electric. The Town, in conjunction with the County of Placer, could also enact an ordinance in accordance with Government Code Section 51200 et. seq., the California Land Conservation Act of 1965, which would permit the Town to acquire trail easements from landowners in return for lower tax assessments on that portion of the property.

C. PURCHASE:

Although purchase of easements is the least preferred alternative, due to cost, it may prove necessary on private parcels where development has already occurred and where there is little prospect of re-development that would allow the Town to condition the implementation of the trail.

The following are ideas for supplemental funding through State, Local and Federal sources:

State and Local Funding Sources:

1. Developer Fees

The California Planning, Zoning and Development Laws (Section 66477, Quimby Act) allow a Town to collect fees from developers in exchange for the

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rights to develop a property. These can be "in lieu" of the required dedications of open space or as the County of Riverside currently does, a surcharge (\$50) for each new dwelling that is used for trail implementation.

2. Trail Fees

The Town could consider the establishment of a pleasure riding tax in accordance with the provisions of Government Code Section 53940 et seq. in order to finance the acquisition, construction and maintenance of the trail system. The monies collected from this tax must be placed in a special fund, and can only be used to defray the reasonable expense of collecting such tax and for the maintenance, acquisition and construction of trails for equestrians and bicyclists. These funds may be used as local matching monies for any federal or state grants for such purposes or for matching funds in the acquisition and development of a federal or state trails project.

3. Bonds and Initiatives

Locally applied bond issues or land use control propositions can be used to further the goals of trails and park land development. These instruments may take the form of ballot measures that are drafted by agencies and/or citizenry, or alternatively as bond acts drafted by state legislators for passage in the California State Assembly and Senate. Their purposes include financing acquisition, designating specific land areas for conservation, or setting basic land use policies. The success of any local bond measure depends on active local backing. In addition, if it requires levying additional property taxes, voters must approve it by a two-thirds majority.

4. Fund Raising Special Events

The Town, with the assistance of trail advocacy groups like the Loomis Basin Horseman's Association, could sponsor a special event such as a trail ride or walk-a-thon. This could take place along a portion of the trail that has safe passage, but is in need of improvement or along completed segments adjacent to segments that need acquisition or development. Local merchants who derive business from the equestrian community (tack and feed) or bicycle stores could also help sponsor this event. Events of this kind help to generate revenues as well as building support for the further development and continued maintenance of the trail system.

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Another popular event is a bike rally, featuring a variety of distance rides, which raises public awareness of the trail system and opens space concerns, in addition to money. Sponsors are the key to a successful event. They can donate t-shirts, food, printing, and other services. Sponsors also help to defray event costs, thereby increasing the amount raised.

Grant Funding Sources

The following are potential sources of federal, state, and local grant funding sources for trail implementation:

- TEA-21 Transportation Enhancement Activities Program (TEA; SANDAG)
- TEA-21 Congestion Management & Air Quality Program (CMAQ)
- TEA-21 Surface Transportation Program (STP)
- TEA-21 Recreational Trails Program (CA DPR)
- TEA-21 National Highway System
- TEA-21 National Scenic Byways Program
- Environmental Enhancement and Mitigation Program (EEM; CTC)
- Land and Water Conservation Fund (CA DPR)
- Habitat Conservation Fund Program (CA DPR)
- Safe Routes to School Program (SRS; Caltrans)
- Bicycle Transportation Account Program (Caltrans)
- AB 2766 Vehicle Registration Funds (APCD)

IMPLEMENTATION COSTS

The following is a list of typical approximate costs (circa 2009) associated with the development of Multi-purpose trails (Per Mile Costs)

- Compacted dirt trail tread: \$ 25,000 - \$45,000 (with no gradient problems)
- Multi-purpose trail Compacted dirt trail tread: \$40,000 - \$65,000 (with gradient problems)
- Signage - Trail markers \$220 (4 per mile)
- Fencing \$ 42,240
- Bridge (pre-fabricated, does not include land) \$ 50,000 - \$ 100,000

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Trails Implementation

- Rest areas \$ 5,000 - \$ 10,000
- Trail Rules Sign \$ 250

MANAGEMENT ISSUES

Trails Coordinator:

The Town currently does not have a Parks Supervisor staff position assigned to trail activities which includes regular patrols of the trail system, a quarterly written evaluation of each trail, and oversight of contract maintenance personnel. Until such a time as when there are enough trails to warrant a special position, contractors might be hired to perform the necessary work including clearing of vegetation, weed control, repair of drainage or erosion problems, replacement of stolen, damaged, or obsolete signs and repair of damaged fencing.

Maintenance

The maintenance of all trail segments, consistent with the trail standards, shall be the responsibility of the Town's Public Works Department.

Recreational Trail Inspection Report Form:

The Town might should consider utilizing a Recreational Trail Inspection Report form to document the conditions of trail segments. This form is an excellent tool and is a critical link in the process of accident prevention. It is a practical way to prevent foreseeable accidents because it prompts employees and supervisors to systematically inspect for hazardous conditions and remedy these conditions before they exist.

Encroachments:

All parties that have encroached on the designated trail should be immediately notified that removal of these obstructions is required. The encroachments pose a safety and liability risk to the Town and to the encroacher, therefore their immediate correction is necessary.

Access Control:

In providing for trails, the Town should seek to ensure that the rights of residents and property owners, including their peace, privacy, safety, health and

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Trails Implementation

property, are not jeopardized by unmanaged, inappropriate, or irresponsible public use. With the use of signage, fencing, and active trail management the Town can direct access to the locations designated in this Master Plan.

Motorized Vehicles Control:

Except for authorized maintenance and emergency vehicle access needs, the trail system is for non-motorized use only. Trail entry points will be designed to discourage motorized vehicle use. Trail signage, barriers, fences, and active trail management will help restrict use by motorized vehicles.

Trail Closures:

Some trail sections may need to be temporarily closed due to hazardous conditions. These may occur when heavy rains cause trail washouts or when landslides block the use of the trail. Construction on or adjacent to the trail could also force the closure of the trail because of safety concerns. These conditions should be corrected as soon as possible and the trail reopened to use by the public. Any unsatisfactory condition and corrective action should be noted on the Recreational Trail Inspection form. As soon as practical after heavy rains, the Town shall inspect all creek crossings to determine if closure of a crossing is necessary and to conspicuously post the closure is warranted until the crossing is determined to be again safe.

When a trail must be closed due to construction, the Town should advise the individuals performing the construction that the area must be posted prior to the closure with notice of the dates that the trail will be closed and advising of an alternate route. The signage should also indicate the expected date of trail reopening. The Town should work with the applicant to design an alternate route to ensure safety and convenience to trail users. Prior to reopening, Town staff should inspect the trail to ensure that the trail is safe and ready for use.

Daylight Hour Trail Use:

Evening use of the trail will be prohibited. Trail signage will indicate this restriction. The evening closure serves several purposes:

1. Reduces the impact of the trail on neighboring private properties by limiting hours of use, and,
2. Allows law enforcement personnel to take corrective action against viola-

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Trails Implementation

tors on the trail who may have criminal intent.

Trail Brochure:

A simple brochure should be prepared and distributed to trail users. It can be distributed through tack and feed stores, bicycle stores, trail heads, staging areas and at the Town of Loomis Town Hall. The brochure should include a trail map designating all trails by their assigned trail number, which will also appear on trail markers.

Rest areas, staging areas, police stations, fire stations and hospitals should be indicated. Points of interest such as historical structures, unique vegetation, wildlife habitats and view opportunities could also be noted. This brochure should contain a map of completed and proposed sections of the system and also should include:

1. Standard trail etiquette;
2. Emergency contact phone numbers (Police, Fire, & Sheriff); and,
3. Information on how the public can help to implement the remainder of the trail system (ex: donations, public involvement, volunteer groups).

Trail Etiquette:

- Reckless/negligent use on all trails will be prohibited. All persons shall ride or operate at a safe, controlled speed and in a responsible manner. Excessive speed and reckless/negligent operation are prohibited.
- Control your horse or bicycle. Be alert and attentive.
- Keep to the right of the trail.
- Pick up litter when you find it, even if its not yours.
- Remain only on designated trails. Respect closures and do not trespass on private property.
- Obey all directional and instructional signs.
- Safety helmets are recommended for bicyclists and equestrians.
- Yielding: Except as dictated by special conditions, bicyclists shall yield to both pedestrians and equestrians, and pedestrians shall yield to equestrians. Equestrians shall be aware and considerate of bicyclists and pedestrians.
- Make known your approach well in advance. A friendly greeting is considerate and works well; don't startle others. Show your respect when passing

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others by slowing down or even stopping. Anticipate that other trail users may be around corners or in blind spots.

- Never spook animals. All animals are startled by an unannounced approach, sudden movements, or loud noise. This can be dangerous for you, for others, and for the animals. Give animals extra room and time to adjust to you.
- Motorized vehicles are prohibited.

Volunteer Management:

In many communities, volunteer organizations not only advocate for trail implementation, but also physically maintain large portions of the trail system for the Town. Groups such as this are critical to the full development of the trail system and its continued maintenance. The Town should also explore "trail adoption" programs, inviting service organizations to undertake patrol and maintenance of other segments. The Town of Loomis could also organize a "trail maintenance day" where large numbers of citizens could be called into assistance for a yearly clean up of the trail system.

Trail Users:

All trails shall be designated as multi-use providing opportunities for pedestrians, bicyclists, and equestrians. No motorized vehicles except authorized trail maintenance vehicles and emergency vehicles shall be allowed on the trails. Should conflicts arise on specific trail segments in the future, the Town may restrict the use on certain segments to avoid environmental degradation, conflicts with properties adjacent to the trail, or trail user conflicts.

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